Journal of Crystal Growth 108 (1991) 834–839
North-Holland

Author index

Abernathy, C.R., S.J. Pearton and N.T. Ha, Sn doping of GaAs and AlGaAs grown by metalorganic molecular beam epitaxy 108 (1991) 827
Ackermann, D.K., see Brown 108 (1991) 455
Akaishi, M., see Kanda 108 (1991) 421
Allen, S.J., see Bhat 108 (1991) 441
Ananth, R. and W.N. Gill, Self-consistent theory of dendritic growth with convection 108 (1991) 173
Aoki, Y., S. Hayashi and H. Komatsu, The effect of magnetic field on crystallization of γ-phase alloy in the Cu–Zn system 108 (1991) 121
Armitage, D.N., N.I. Dunhill, R.H. West and J.O. Williams, The thermal decomposition of copper(II) hexafluoroacetylacetonate under MOCVD conditions 108 (1991) 683
Ashby, S., see Sun 108 (1991) 473
Astles, M.G., G. Blackmore, O.D. Dosser, H. Hill, M. Lyster, G.R. Booker and M. Hill, Interface abruptness in LPE grown (CdHg)Te layers on CdTe substrate 108 (1991) 549
Aubry, A., see Skoulika 108 (1991) 285

Bacon, D.J., see Meduoye 108 (1991) 627
Balk, P., see Glade 108 (1991) 449
Barilo, S.N., A.P. Ges, S.A. Guretskii, D.I. Zhigunov, A.A. Ignatenko, A.M. Luginets and E.F. Shapovalova, Seeded growth of rare-earth orthoferrites from B_2O_3–BaF_2–BaO solvent. I. Study of conditions and physico-chemical crystallization parameters 108 (1991) 309
Barilo, S.N., A.P. Ges, S.A. Guretskii, D.I. Zhiganov, A.A. Ignatenko, A.N. Igumentsev, I.D. Lomako and A.M. Luginets, Seeded growth of rare-earth orthoferrites from B_2O_3–BaF_2–BaO solvent. II. Growth of high-quality $RFeO_3$ single crystals 108 (1991) 314
Basmaji, P., see Bernussi 108 (1991) 615
Ben-Jacob, E., see Raz 108 (1991) 637
Bennema, P., see Vogels 108 (1991) 733
Bennema, P., see Wang 108 (1991) 821
Benz, K.W., see Bischopink 108 (1991) 465
Berkowski, M., see Iliev 108 (1991) 219
Berkowski, M., K. Iliev, V. Nikolov, P. Peshev and W. Piekarczyk, Conditions of maintenance of a flat crystal/melt interface during Czochralski growth of bismuth germanium oxide single crystals 108 (1991) 225
Bernussi, A.A., F. Iikawa, P. Motisuke and P. Basmaji, Properties of $Al_xGa_{1-x}As$ with an AlAs buffer layer on Si substrates grown by metalorganic vapor phase epitaxy 108 (1991) 615
Bhat, R., M.A. Koza, K. Kash, S.J. Allen, W.P. Hong, S.A. Schwarz, G.K. Chang and P. Lin, Growth of high quality AlInAs by low pressure organometallic chemical vapor deposition for high speed and optoelectronic device applications 108 (1991) 441
Bhattacharya, S., see Ghosh 108 (1991) 534
Bischopink, G. and K.W. Benz, Growth of $Al_xGa_{1-x}Sb$ bulk material from metallic solution 108 (1991) 465
Blackmore, G., see Astles 108 (1991) 549
Bohling, D.A., see Jones 108 (1991) 439
Bohm, J., see Reiche 108 (1991) 759
Booker, G.R., see Astles 108 (1991) 549
Bornside, D.E., T.A. Kinney and R.A. Brown, Minimization of thermoelastic stresses in Czochralski grown silicon: application of the integrated system model 108 (1991) 779
Bosenberg, W.R., R.J. Lane and C.L. Tang, Growth of large, high-quality beta-barium metaborate crystals 108 (1991) 394
Böttner, H., see Lambrecht 108 (1991) 301
Bouillet, C., see Lefebvre 108 (1991) 655
Brown, C.M., D.K. Ackermann, D.L. Purich and B. Finlayson, Nucleation of calcium oxalate monohydrate; use of turbidity measurements and computer-assisted simulations in characterizing early events in crystal formation 108 (1991) 455
Brown, R.A., see Maroudas 108 (1991) 399
Brown, R.A., see Bornside 108 (1991) 779
Brown, W.E., see Eidelman 108 (1991) 385
Brown, W.E., see Tomazic 108 (1991) 670
Buhl, J.-Ch., Hydrothermal synthesis and characterization of nitride sodalite single crystals 108 (1991) 143

Carlson, D.J. and A.F. Witt, Microsegregation in conventional Si-doped LEC GaAs 108 (1991) 508
Chan, H.-K. and I. Gonda, Studies of the mechanism of crystal growth of hexamethylmelamine. II. Rates of growth of the crystal faces 108 (1991) 751

Chang, G.K., see Bhat 108 (1991) 441
Chaudhuri, S., see Ghosh 108 (1991) 534
Chen, M.-H., see Shyy 108 (1991) 247
Chen, W.H., see Hu 108 (1991) 561
Chinoy, P.B. and S.K. Ghandhi, Design considerations for the elimination of recirculation in horizontal epitaxial reactors 108 (1991) 105
Choe, K.S., J.A. Stefani, T.B. Dettling, J.K. Tien and J.P. Wallace, Effects of growth conditions on thermal profiles during Czochralski silicon crystal growth 108 (1991) 262
Chvoj, Z., see Yuferev 108 (1991) 367
Cockayne, B., see Wright 108 (1991) 525
Coméra, J., see Thevenard 108 (1991) 572
Czekalski, T., see Kowalski 108 (1991) 744

Deng Peizhen, see Zhang 108 (1991) 377
Deparis, C. and J. Massies, Surface stoichiometry variation associated with GaAs (001) reconstruction transitions 108 (1991) 157
Dettling, T.B., see Choe 108 (1991) 262
Di Persio, J., see Lefebvre 108 (1991) 655
Diers, V., see Mühlbauer 108 (1991) 41
Dilawari, A.H. and J. Szekely, A mathematical representation of a modified stagnation flow reactor for MOCVD applications 108 (1991) 491
Djinović, Z., Z. Djurić, Z. Jaksić, F. Kermendi and R. Roknić, Isothermal vapor phase epitaxy of (Hg,Cd)Te from Te-rich $Hg_{1-y}Te_y$ source 108 (1991) 710
Djurić, Z., see Djinović 108 (1991) 710
Dormans, G.J.M., OMCVD of transition metals and their silicides using metallocenes and (di)silane or silicon tetrabromide 108 (1991) 806
Dosser, O.D., see Astles 108 (1991) 549
Dunhill, N.I., see Armitage 108 (1991) 683

Eidelman, N., W.E. Brown and J.L. Meyer, The effect of pyrophosphate concentrations on calcium phosphate growth on well-crystallized octacalcium phosphate and hydroxyapatite seed crystals 108 (1991) 385
Elwenspoek, M.C., see Vogels 108 (1991) 733
Evans, K.E., see Meduoye 108 (1991) 627
Evers, J., see Lambrecht 108 (1991) 301

Favier, J.J., see Thevenard 108 (1991) 572
Fernández-Diaz, L., see Prieto 108 (1991) 770
Finlayson, B., see Brown 108 (1991) 455

Gan Fuxi, see Zhang 108 (1991) 377
Gardeniers, J.G.E., C.H. Klein Douwel and L.J. Giling, Reduced pressure silicon CVD on hemispherical substrates 108 (1991) 319
Gatica, J.E., see Scholtz 108 (1991) 190
Ges, A.P., see Barilo 108 (1991) 309
Ges, A.P., see Barilo 108 (1991) 314
Ghandi, S.K., see Chinoy 108 (1991) 105
Ghosh, S., A. Sarkar, S. Bhattacharya, S. Chaudhuri and A.K. Pal, Microstructure of ZnO films produced by reactive DC sputtering technique 108 (1991) 534
Giling, L.J., see Gardeniers 108 (1991) 319
Gill, W.N., see Ananth 108 (1991) 173
Glade, M., J. Hergeth, D. Grützmacher, K. Masseli and P. Balk, Diffusion of Zn acceptors during MOVPE of InP 108 (1991) 449
Gonda I., see Chan 108 (1991) 751
Goto, Y., A. Hayashi, Y. Kimura and M. Nakayama, Second harmonic generation and crystal growth of substituted thienyl chalcone 108 (1991) 688
Grabmaier, J.G., see Mühlbauer 108 (1991) 41
Grant, M.L. and D.A. Saville, The role of transport phenomena in protein crystal growth 108 (1991) 8
Gruehn, R., see Hussain 108 (1991) 831
Grützmacher, D., see Glade 108 (1991) 449
Guretskii, S.A., see Barilo 108 (1991) 309
Guretskii, S.A., see Barilo 108 (1991) 314

Ha, N.T., see Abernathy 108 (1991) 827
Hamabe, T., see Kitano 108 (1991) 277
Harold, M., see Jones 108 (1991) 73
Hartel, R.W., see Liang 108 (1991) 129
Hartman, P., see Heijnen 108 (1991) 290
Hayashi, A., see Goto 108 (1991) 688
Hayashi, S., see Aoki 108 (1991) 121
Heijnen, W.M.M. and P. Hartman, Structural morphology of gypsum ($CaSO_4 \cdot 2H_2O$), brushite ($CaHPO_4 \cdot 2H_2O$) and pharmacolite ($CaHAsO_4 \cdot 2H_2O$) 108 (1991) 290
Henry, C.R. and B. Mutaftschiev, Transient growth and evaporation kinetics of a singular face containing linear sinks: time dependent BCF theory 108 (1991) 603
Herbeaux, C., see Lefebvre 108 (1991) 655
Hergeth, J., see Glade 108 (1991) 449
Hermoneit, B., see Reiche 108 (1991) 759
Herres, N., see Lambrecht 108 (1991) 301
Hesse, H., see Varnhorst 108 (1991) 429
Hezemans, A.M.F., see Van der Sluis 108 (1991) 719
Hill, H., see Astles 108 (1991) 549
Hill, M., see Astles 108 (1991) 549
Hlavacek, V., see Scholtz 108 (1991) 190
Hong, W.P., see Bhat 108 (1991) 441
Hottenhuis, M.H.J., see Vogels 108 (1991) 733
Hu, H.C., W.H. Chen and T.Y. Lee, Synthesis kinetics and particle size distribution of zeolite A 108 (1991) 561
Hunter, B., see Sun 108 (1991) 473

Hussain, A. and R. Gruehn, Crystal growth of hexagonal potassium tungsten bronze by chemical transport 108 (1991) 831

Ignatenko, A.A., see Barilo 108 (1991) 309
Ignatenko, A.A., see Barilo 108 (1991) 314
Igumentsev, A.N., see Barilo 108 (1991) 314
Iikawa, F., see Bernussi 108 (1991) 615
Iliev, K., M. Berkowski, V. Nikolov, P. Peshev and W. Piekarczyk, Conditions of existence and character of the temperature fluctuations during Czochralski growth of oxide single crystals 108 (1991) 219
Iliev, K., see Berkowski 108 (1991) 225
Ishikawa, M., see Nishikawa 108 (1991) 728
Ishitani, A., see Oshita 108 (1991) 499
Ishizawa, Y., see Otani 108 (1991) 425
Itoh, H., T. Nakamura, H. Iwahara and H. Sakamato, Observations of growth process of chemically vapor deposited diamond single crystal 108 (1991) 647
Ivanov, S.V., P.S. Kop'ev and N.N. Ledentsov, Interplay of beryllium segregation and diffusion in heavily doped GaAs and AlGaAs grown by molecular beam epitaxy (thermodynamic analysis) 108 (1991) 661
Iwahara, H., see Itoh 108 (1991) 647

Jaksić, Z., see Djinović 108 (1991) 710
Jayarama Reddy, P., see Ramakrishna Reddy 108 (1991) 765
Jones, A.C., S.A. Rushworth, D.A. Bohling and G.T. Muhr, Growth of $Al_xGa_{1-x}As$ by reduced pressure MOVPE using trimethylamine alane (E) 108 (1991) 439
Jones, A.C., see Wright 108 (1991) 525
Jones, S.H., L.K. Seidel, K.M. Lau and M. Harold, Patterned substrate epitaxy surface shapes 108 (1991) 73
Juhász, Z., Compensation of capillarity in $Gd_3Ga_5O_{12}$ growth 108 (1991) 621

Kabe, I., see Kaneko 108 (1991) 335
Kamiński, P., W. Strupiński and K. Roszkiewicz, Effect of substrate temperature on the concentration of point defects in vapour phase epitaxial GaP : N,S 108 (1991) 699
Kanda, H., M. Akaishi and S. Yamaoka, Impurity distribution among vicinal slopes of growth spirals developing on the {111} faces of synthetic diamonds 108 (1991) 421
Kaneko, T., T. Okuno and I. Kabe, Effect of surface composition on the growth rates of silicon carbide by CVD 108 (1991) 335
Kash, K., see Bhat 108 (1991) 441
Katoh, T., see Kuriyama 108 (1991) 37
Kazmierski, C., see Robein 108 (1991) 554
Kermendi, F., see Djinović 108 (1991) 710
Kimura, M., see Sukegawa 108 (1991) 598
Kimura, Y., see Goto 108 (1991) 688
Kinney, T.A., see Bornside 108 (1991) 779
Kitano, M., T. Hamabe, S. Maeda and T. Okabe, Growth of large tetrapod-like ZnO crystals. II. Morphological considerations on growth mechanism 108 (1991) 277
Klein Douwel, C.H., see Gardeniers 108 (1991) 319
Knightley, P., see Moseley 108 (1991) 203
Kobayashi, N., Oxygen transport under an axial magnetic field in Czochralski silicon growth 108 (1991) 240
Kokubun, Y., see Nishikawa 108 (1991) 728
Kolesnikova, E.N., see Yuferev 108 (1991) 367
Komatsu, H., see Aoki 108 (1991) 121
Komatsu, S. and Y. Moriyoshi, Growth forms of β-rhombohedral boron whiskers and platelets prepared in a low-pressure B_2H_6 + He plasma in terms of periodic bond chain method 108 (1991) 63
Komatsu, S., see Okada 108 (1991) 416
Kondo, N., see Yamamoto 108 (1991) 433
Kop'ev, P.S., see Ivanov 108 (1991) 661
Kou, S., see Lan 108 (1991) 1
Kou, S., see Lan 108 (1991) 340
Kou, S., see Lan 108 (1991) 351
Kou, S., see Lan 108 (1991) 541
Kowalski, G., E. Zielinska-Rohozinska and T. Czekalski, X-ray characterization of defect structure in LEC GaAs crystals 108 (1991) 744
Koza, M.A., see Bhat 108 (1991) 441
Kroon, J., see Van der Sluis 108 (1991) 719
Kuhn, S., see Lambrecht 108 (1991) 301
Kuriyama, K., T. Katoh and N. Mineo, Crystal growth and characterization of the filled tetrahedral semiconductor LiZnP 108 (1991) 37

Lambrecht, A., N. Herres, B. Spanger, S. Kuhn, H. Böttner, M. Tacke and J. Evers, Molecular beam epitaxy of $Pb_{1-x}Sr_xSe$ for the use in IR devices 108 (1991) 301
Lan, C.W. and S. Kou, Floating-zone crystal growth with a heated ring covering the melt surface 108 (1991) 1
Lan, C.W. and S. Kou, Floating-zone crystal growth with a heated and immersed shaper – computer simulation 108 (1991) 340
Lan, C.W. and S. Kou, Heat transfer, fluid flow and interface shapes in floating-zone crystal growth 108 (1991) 351
Lan, C.W. and S. Kou, Floating-zone crystal growth with a heated and immersed shaper – experiments 108 (1991) 541
Lane, R.J., see Bosenberg 108 (1991) 394
Lang, A.R. and G.M. Meaden, Complementary orientation-dependent distributions of 1.40 and 2.56 eV cathodoluminescence

on vicinals on {111} in synthetic diamonds 108 (1991) 53
Larsen, C.A., see Li 108 (1991) 439
Lau, K.M., see Jones 108 (1991) 73
Ledentsov, N.N., see Ivanov 108 (1991) 661
Lee, T.Y., see Hu 108 (1991) 561
Lefebvre, A., C. Herbeaux, C. Bouillet and J. Di Persio, Characterization of planar growth defects in slightly-mismatched InGaAs/InP heterostructures 108 (1991) 655
Li, S.H., C.A. Larsen and G.B. Stringfellow, Decomposition mechanisms of trimethylarsine (E) 108 (1991) 439
Liang, B. and R.W. Hartel, Techniques for developing nucleation and growth kinetics from MSMPR data for sucrose crystallization in the presence of growth rate dispersion 108 (1991) 129
Lin, P., see Bhat 108 (1991) 441
Lingart, Yu.K., S.V. Mukhin and N.A. Tikhonova, Mathematical modelling of heat transfer in Stockbarger-type units for ZnSe growth 108 (1991) 233
Lipson, S.G., see Raz 108 (1991) 637
Liu Xiangyang, see Wang 108 (1991) 821
Lomako, I.D., see Barilo 108 (1991) 314
López-Andrés, S., see Prieto 108 (1991) 770
Lu Taijing, K. Toyoda, N. Nango and T. Ogawa, Observation of microdefects and microprecipitates in Si crystals by IR scattering tomography 108 (1991) 482
Luginets, A.M., see Barilo 108 (1991) 309
Luginets, A.M., see Barilo 108 (1991) 314
Lyster, M., see Astles 108 (1991) 549

Maeda, S., see Kitano 108 (1991) 277
Mannami, M., see Tsuji 108 (1991) 817
Maroudas, D. and R.A. Brown, On the prediction of dislocation formation in semiconductor crystals grown from the melt: analysis of the Haasen model for plastic deformation dynamics 108 (1991) 399
Masseli, K., see Glade 108 (1991) 449
Massies, J., see Deparis 108 (1991) 157
Matsumoto, S., see Okada 108 (1991) 416
Matthews, D.N., see Sun 108 (1991) 473
Mayer, I., see Tomazic 108 (1991) 670
Meaden, G.M., see Lang 108 (1991) 53
Meduoye, G.O., D.J. Bacon and K.E. Evans, Computer modelling of temperature and stress distributions in LEC-grown GaAs crystals 108 (1991) 627
Meyer, J.L., see Eidelman 108 (1991) 385
Michaelides, A., see Skoulika 108 (1991) 285
Mineo, N., see Kuriyama 108 (1991) 37
Mizuno, Y., see Tsuji 108 (1991) 817
Moriyoshi, Y., see Komatsu 108 (1991) 63
Moriyoshi, Y., see Okada 108 (1991) 416
Moseley, A.J., J. Thompson, P. Knightley, R.H. Wallis and D.J. Stirland, CODE: a novel single step MOVPE technique for the fabrication of low-dimensional devices, quantum wires and quantum dots 108 (1991) 203
Motakef, S., A high temperature creep model for GaAs 108 (1991) 33
Motisuke, P., see Bernussi 108 (1991) 615
Mühlbauer, A., V. Diers, A. Walther and J.G. Grabmaier, Removal of C/SiC from liquid silicon by directional solidification 108 (1991) 41
Muhr, G.T., see Jones 108 (1991) 439
Mukhin, S.V., see Lingart 108 (1991) 233
Mutaftschiev, B., see Henry 108 (1991) 603

Nakajima, K., see Takenaka 108 (1991) 519
Nakajima, M., see Takamori 108 (1991) 99
Nakamura, T., see Itoh 108 (1991) 647
Nakayama, M., see Goto 108 (1991) 688
Nango, N., see Lu 108 (1991) 482
Nanishi, Y., see Yamamoto 108 (1991) 433
Nikolov, V., see Iliev 108 (1991) 219
Nikolov, V., see Berkowski 108 (1991) 225
Nishikawa, Y., H. Sugawara, M. Ishikawa and Y. Kokubun, Effects of V/III ratio on Zn electrical activity in Zn-doped InGaAlP grown by metalorganic chemical vapor deposition 108 (1991) 728
Nishio, J., Transport restriction effect for gaseous components on the carbon content of LEC GaAs 108 (1991) 150

Ogawa, T., see Lu 108 (1991) 482
Okabe, T., see Kitano 108 (1991) 277
Okada, K., S. Komatsu, S. Matsumoto and Y. Moriyoshi, Growth steps and etch pits appearing on {100} planes of diamonds prepared by combustion-flame deposition method 108 (1991) 416
Okuno, T., see Kaneko 108 (1991) 335
Oliver, P.E., see Wright 108 (1991) 525
Oshita, Y., A. Ishitani and T. Takada, Surface reaction mechanism of $SiCl_2$ with carrier gas H_2 in silicon vapor phase epitaxial growth 108 (1991) 499
Otani, S., T. Tanaka and Y. Ishizawa, Preparation of $(La_{1-x}Ce_x)B_6$ single crystals by the floating zone method 108 (1991) 425

Pal, A.K., see Ghosh 108 (1991) 534
Parbrook, P.J., see Wright 108 (1991) 525
Pearton, S.J., see Abernathy 108 (1991) 827
Peshev, P., see Iliev 108 (1991) 219
Peshev, P., see Berkowski 108 (1991) 225
Piekarczyk, W., see Iliev 108 (1991) 219
Piekarczyk, W., see Berkowski 108 (1991) 225

Piekarczyk, W. and W.A. Yarbrough, Application of thermodynamics to the examination of the diamond CVD process. II. A model of diamond deposition process from hydrocarbon–hydrogen mixtures 108 (1991) 583
Polman, A., S. Roorda, P.A. Stolk and W.C. Sinke, Triggering explosive crystallization of amorphous silicon 108 (1991) 114
Pougnet, A.M., see Robein 108 (1991) 554
Prieto, M., L. Fernández-Diaz and S. López-Andrés, Spatial and evolutionary aspects of nucleation in diffusing-reacting systems 108 (1991) 770
Purich, D.L., see Brown 108 (1991) 455

Ramakrishna Reddy, K.T. and P. Jayarama Reddy, Preparation and properties of laser evaporated $CuGaSe_2$ thin films 108 (1991) 765
Raz, E., S.G. Lipson and E. Ben-Jacob, New periodic morphologies observed during dendritic growth of ammonium chloride crystals in thin layers 108 (1991) 637
Reich, P., J. Bohm, B. Hermoneit, P. Rudolph, R. Schalge and D. Schultze, The effect of an electrical field on the growth of lithium niobate single crystals 108 (1991) 759
Robein, D., C. Kazmierski, A.M. Pougnet and B. Rose, Iron incorporation in InP layers using a ferrocene source in atmospheric pressure MOVPE 108 (1991) 554
Roknić, R., see Djinović 108 (1991) 710
Roorda, S., see Polman 108 (1991) 114
Rose, B., see Robein 108 (1991) 554
Roszkiewicz, K., see Kamiński 108 (1991) 699
Rouzaud, A., see Thevenard 108 (1991) 572
Rudolph, P., see Reiche 108 (1991) 759
Rushworth, S.A., see Jones 108 (1991) 439

Sakamoto, H., see Itoh 108 (1991) 647
Saville, D.A., see Grant 108 (1991) 8
Sarkar, A., see Ghosh 108 (1991) 534
Schalge, R., see Reiche 108 (1991) 759
Scholtz, J.H., J.E. Gatica, H.J. Viljoen and V. Hlavacek, Coating of fibrous substrates by CVD; analysis of the fiber evolution 108 (1991) 190
Schultze, D., see Reiche 108 (1991) 759
Schwarz, S.A., see Bhat 108 (1991) 441
Sealey, K., see Sun 108 (1991) 473
Seidel, L.K., see Jones 108 (1991) 73
Shapovalova, E.F., see Barilo 108 (1991) 309
Shirmer, O.F., see Varnhorst 108 (1991) 429
Shyy, W. and M.-H. Chen, Interaction of thermocapillary and natural convection flows during solidification: normal and reduced gravity conditions 108 (1991) 247
Sinke, W.C., see Polman 108 (1991) 114
Skoulika, S., A. Michaelides and A. Aubry, Habit modification of coordination compounds in the presence of additives; a study of the system Ni(β-ala)$_2 \cdot 2H_2O$–glycine 108 (1991) 285
Spanger, B., see Lambrecht 108 (1991) 301
Stefani, J.A., see Choe 108 (1991) 262
Stirland, D.J., see Moseley 108 (1991) 203
Stolk, P.A., see Polman 108 (1991) 114
Stringfellow, G.B., see Li 108 (1991) 439
Strupiński, W., see Kamiński 108 (1991) 699
Sugawara, H., see Nishikawa 108 (1991) 728
Sukegawa, T., M. Kimura and A. Tanaka, LPE growth of silicon by yo-yo solute feeding method 108 (1991) 598
Sun, B.N., K.N.R. Taylor, B. Hunter, D.N. Matthews, S. Ashby and K. Sealey, Two classes of growth spirals on single crystals of YBCO 108 (1991) 473
Susuki, Y., see Tsuji 108 (1991) 817
Szekely, J., see Dilawari 108 (1991) 491

Tacke, M., see Lambrecht 108 (1991) 301
Takada, T., see Oshita 108 (1991) 499
Takamori, A., T. Yokotsuka, K. Uchiyama and M. Nakajima, $Ga_xIn_{1-x}P$/GaAs grown by gas source molecular beam epitaxy using phosphine 108 (1991) 99
Takenaka, C. and K. Nakajima, Effect of electric current on the LPE growth of InP 108 (1991) 519
Tanaka, A., see Sukegawa 108 (1991) 598
Tanaka, T., see Otani 108 (1991) 425
Tang, C.L., see Bosenberg 108 (1991) 394
Taylor, K.N.R., see Sun 108 (1991) 473
Thevenard, D., A. Rouzaud, J. Coméra and J.J. Favier, Influence of convective thermal oscillations on a solidification interface in Bridgman growth 108 (1991) 572
Thompson, J., see Moseley 108 (1991) 203
Tien, J.K., see Choe 108 (1991) 262
Tikhonova, N.A., see Lingart 108 (1991) 233
Tomazic, B.B., I. Mayer and W.E. Brown, Ion incorporation into octacalcium phosphate hydrolyzates 108 (1991) 670
Toyoda, K., see Lu 108 (1991) 482
Tsuji, M., Y. Mizuno, Y. Susuki and M. Mannami, Misfit dislocations in epitaxial PbS/SnTe(001) and PbTe/SnTe(001) biocrystals 108 (1991) 817

Uchiyama, K., see Takamori 108 (1991) 99

Van der Sluis, P., A.M.F. Hezemans and J. Kroon, Computer knowledge base for crystallization 108 (1991) 719
Van Enckevort, W.J.P., see Wang 108 (1991) 821
Van Rosmalen, G.M., see Witkamp 108 (1991) 89

Varnhorst, T., O.F. Shirmer and H. Hesse, Blue coloration of $KNbO_3$ caused by scattering 108 (1991) 429
Vesenka, J.P. and Y. Yeh, Defect site nucleation of microbubbles as a source of dynamic light scattering at the growing ice–water interface 108 (1991) 19
Viljoen, H.J., see Scholtz 108 (1991) 190
Vogels, L.J.P., P. Bennema, M.H.J. Hottenhuis and M.C. Elwenspoek, On the morphology of ammonium nitrate (III): theory and observation 108 (1991) 733

Wallace, J.P., see Choe 108 (1991) 262
Wallis, R.H., see Moseley 108 (1991) 203
Walther, A., see Mühlbauer 108 (1991) 41
Wang Yaoshui, Zheng Manna, P. Bennema, Zhu Rui, Ye Guifen, Liu Xiangyang and W.J.P. van Enckevort, The occurrence of scattering centres and dislocations in KDP crystals 108 (1991) 821
West, R.H., see Armitage 108 (1991) 683
Westwood, D.I., see Woolf 108 (1991) 25
Williams, J.O., see Armitage 108 (1991) 683
Williams, R.H., see Woolf 108 (1991) 25
Witkamp, G.J. and G.M. van Rosmalen, Growth of gypsum. II. Incorporation of cadmium 108 (1991) 89
Witt, A.F., see Carlson 108 (1991) 508
Woolf, D.A., D.I. Westwood and R.H. Williams, The molecular beam epitaxial growth of GaAs on Si(100): a variable growth temperature study 108 (1991) 25
Wright, P.J., B. Cockayne, P.J. Parbrook, P.E. Oliver and A.C. Jones, Control of prereaction in the metalorganic chemical vapour deposition of zinc- and cadmium-based chalcogenides 108 (1991) 525

Yamamoto, N., N. Kondo and Y. Nanishi, Desorption process of Ga atoms from the mask surface in selective area growth of GaAs by electron-cyclotron-resonance plasma-excited molecular-beam epitaxy (ECR-MBE) 108 (1991) 433
Yamaoka, S., see Kanda 108 (1991) 421
Yarbrough, W.A., see Piekarczyk 108 (1991) 583
Ye Guifen, see Wang 108 (1991) 821
Yeh, Y., see Vesenka 108 (1991) 19
Yokotsuka, T., see Takamori 108 (1991) 99
Yuferev, V.S., Z. Chvoj and E.N. Kolesnikova, The effect of radiative heat transfer on morphological stability during directional solidification of a binary melt 108 (1991) 367

Zhang Qiang, Deng Peizhen and Gan Fuxi, X-ray topographic observation of dislocation structure in sapphire single crystal grown by temperature gradient technique 108 (1991) 377
Zheng Manna, see Wang 108 (1991) 821
Zhigunov, D.I., see Barilo 108 (1991) 309
Zhigunov, D.I., see Barilo 108 (1991) 314
Zhu Rui, see Wang 108 (1991) 821
Zielinska-Rohozinska, E., see Kowalski 108 (1991) 744

Journal of Crystal Growth 108 (1991) 840–843
North-Holland

Subject index

Accelerated-crucible rotation technique 262
Adsorption 37, 89, 233, 290, 319, 433, 499
Alloys 121, 572
Aluminum
- gallium antimonide 465
- gallium arsenide 439, 615, 661, 827
- indium arsenide 203, 441
- organic 439
- oxide 377
Ammonium
- chloride 637
- nitrate 733
Apparatus
- for melt growth
- - by Czochralski method
- - - of silicon 262, 779
- - by floating zone method
- - - of sodium nitrate 1, 340, 541
- - by uniaxial solidification
- - - of silicon 41
- for thin film growth
- - by combustion flame deposition method
- - - of diamonds 416
- - by vapor phase epitaxy
- - - through evaporation and condensation
- - - - of mercury cadmium telluride 710
- for miscellaneous purposes
- - coating of fibrous substrates by CVD 190
- - in-situ observation of defects by IR 482
- - near IR imaging 508

Barium
- carbonate 370
- metaborate, β 394
Bismuth
- germanates 219, 225
Boron 63, 190
Boundary layer control 190, 394, 399
Brushite 290
Burton–Cabrera–Frank theory 603

Cadmium
- mercury telluride 549, 710
- organic 525
- selenide 525
Calcium
- hydrogen arsenate, hydrate 290
- hydrogen phosphate, hydrate 290
- oxalates, hydrate 455
- phosphates 385, 670
- sulphate, hydrate 89, 290
Characterization methods
- by absorption spectroscopy 534
- by atomic absorption spectrometry 301
- by Auger electron spectroscopy 301, 335, 683, 765, 806
- by cathodoluminescence 53, 421
- by chemical analysis 385, 554, 670
- by deep level transient spectroscopy 699
- by differential thermal analysis 37
- by eddy current sensor 262
- by electrical methods 25, 37, 203, 301, 449, 508, 519, 534, 554, 615, 699, 728, 765
- by electron microscopy 63, 203, 277, 433, 465, 534, 549, 561, 647, 655, 661, 670, 765, 806, 817, 831
- by electron probe microanalysis 465, 549
- by emission 699
- by infrared spectroscopy 143, 508, 670
- by light scattering 19, 482
- by neutron activation analysis 309
- by nuclear magnetic resonance 561
- by optical microscopy 99, 285, 314, 421, 473, 482, 541, 751
- by particle size distribution analysis 129, 561
- by photoluminescence 99, 441, 525, 615, 728
- by reflectance 114, 429, 615
- by reflection high energy electron diffraction 25, 157
- by Rutherford back scattering 37, 549, 817
- by second harmonic generation 688
- by secondary ion mass spectrometry 335, 441, 449, 549, 554, 827
- by thermoanalysis 143
- by transmission spectroscopy 429
- by X-ray photoemission spectroscopy 683
- by X-ray methods 25, 37, 63, 99, 277, 285, 301, 309, 314, 319, 335, 377, 385, 441, 525, 561, 615, 655, 670, 683, 728, 744, 765, 821
Cobalt 806
- silicide 806
Computer simulation 105, 340, 351, 455, 499, 627, 779
Constitutional supercooling 367
Convection 1, 8, 41, 105, 150, 173, 190, 225, 233, 240, 247, 340, 351, 394, 508, 572, 598
Copper
- gallium selenide 715
- organic 683
- oxides 683
- zinc alloy 121

Dendritic growth 173, 637
Devices 203, 301, 441, 621
Diamond 53, 416, 421, 583, 647
Diffusional control 8, 190, 367, 449, 465, 491, 661, 751, 770
Dislocations 19, 33, 377, 399, 473, 615, 627, 751, 779, 817, 821
Dissolution 309, 519, 598, 670
Distribution coefficient 19, 89, 367, 508
Dopants 301, 449, 508, 554, 572, 598, 661, 728, 827

Etching
– chemical 19, 203, 377, 416, 425

Gadolinium
– gallium garnet 621
Gallium
– arsenide 25, 33, 73, 105, 150, 157, 439, 508, 627, 661, 744, 827
– indium arsenide 203
– indium phosphide 99
– phosphide 699
Garnets 621
Grain boundary 277, 821
Gypsum 89, 290

Heat flow control 41, 233, 247, 367, 541, 621, 779
Heterojunction 441, 549, 655

Ice 19
Impurity 19, 53, 89, 150, 240, 285, 314, 367, 394, 421, 455, 482, 508, 598, 615, 670, 821
Indium
– gallium aluminum phosphide 728
– organic 449, 554
– phosphide 203, 449, 519, 554
Interface 1, 19, 219, 225, 247, 340, 351, 394, 425, 508, 541, 572, 621, 655, 759, 817
Iron 806
– silicide 806

Kinetics
– of crystallization 561
– of dislocation multiplication 399
– of dissolution 670
– of growth 25, 73, 105, 114, 129, 262, 277, 314, 335, 385, 439, 465, 499, 519, 525, 554, 561, 603, 670, 710, 751, 759, 806, 821
– of impurity incorporation 89
– of interface control 394, 751, 759
– of nucleation 114, 121, 129, 277, 314, 455, 561, 770

Lanthanum
– cerium boride 425
Lattice mismatch 99, 441, 655
Lead
– strontium selenide 301
– sulphide 817
– telluride 817
Lithium
– niobate 759
– zinc phosphide 37

Mathematical model 129, 233, 439, 491
Melt growth technique
– by Bridgman–Stockbarger method
– – of copper zinc alloy 121
– – of ice 19
– – of tin bismuth alloy 572
– – of zinc selenide 233
– by Czochralski method
– – of bismuth germanates 219, 225
– – of gadolinium gallium garnet 621
– – of gallium arsenide 150, 508, 627, 744
– – of lithium niobate 759
– – of semiconductors 399
– – of silicon 240, 262, 779
– – theory of 240, 399
– by floating zone method
– – of lanthanum cerium boride 425
– – of sodium nitrate 1, 340, 351, 541
– by traveling heater method
– – of aluminum gallium antimonide 465
– – theory of 465
– by uniaxial solidification
– – of lithium zinc phosphide 37
– – of sapphire 377
– – of silicon 41
– – theory of 367
– by zone melting
– – theory of 247
– using immersed sheet heater
– – of sodium nitrate 541
Mercury
– cadmium telluride 549, 710
Microgravity 1, 8, 173, 247, 340, 351, 598
Morphological stability 63, 173, 319, 367, 670, 733
Morphology of growth 25, 53, 63, 73, 203, 247, 277, 285, 290, 309, 314, 319, 394, 416, 637, 647, 661, 670, 733, 751, 759, 821, 831

Nickel
– coordination compound 285
Nitrite sodalite 143
Nucleation 114, 121, 129, 277, 455
Numbers
– Biot 779
– Grashof 173, 219, 225, 247
– Marangoni 1, 247, 340
– Nusselt 190
– Peclet 173, 779
– Prandtl, 351
– Reynolds 219, 225
– Stefan 779

Optoelectronics 441
Organic crystals 8, 129, 285, 688, 751

Perfection of crystals 53, 203, 314, 394, 399, 425, 429, 482, 508, 541, 655, 688, 699, 744, 779, 821
Periodic bond chain theory 63, 290, 733
Pharmacolite 290
Phase diagrams 309, 314, 670
Phenomenological theory 73, 399, 508, 572
Potassium
– dihydrogen phosphate 821
– niobate 429
– tungsten bronze 831
Precursor 439, 806
Proteins 8
Purification of materials 19, 41

Quantum wells/size effects 203

Rare earth
– orthoferrites 309, 314

Sapphire 377
Segregation 508
Silicon 41, 114, 240, 262, 482, 499, 598
– carbide 335
Sodium
– nitrate 1, 340, 351, 541
Solid growth technique
– by explosive crystallization
– – of amorphous silicon 114
Solution growth technique
– by flux method
– – of β barium metaborate 394
– – of rare earth orthoferrites 309, 314
– – of yttrium barium cuprate 473
– by gel method
– – of barium carbonate 770
– – of strontium carbonate 770
– by hydrothermal growth
– – of nitrite sodalite 143
– by low temperature method
– – of ammonium nitrate 733
– – of calcium oxalate, hydrate 455
– – of calcium phosphates 385, 670
– – of gypsum 89
– – of nickel bisglycinate, dihydrate 285
– – of organic crystals 751
– – of zeolite 561
– by top seeded pulling method
– – of potassium niobate 429
– theory of 290
– using computer knowledge base 719
Stefan problem or moving boundary problem 173, 247, 340, 351, 367
Step 416, 473, 821
Strain 33
Sucrose 129
Superconductivity 473
– bulk 473
– characterization 473
– high T_c 473
Supercooling, supersaturation 89, 114, 129, 173, 309, 314, 519, 637, 670, 770
Surface energy, determination of 621, 733
Surface processes 290, 499, 603, 661
Surface structure 25, 53, 73, 157, 335, 473, 733

Thermodynamics 89, 367, 583, 661, 670, 806
Thin film growth
– by liquid phase epitaxy
– – of indium phosphide 519
– – of mercury cadmium telluride 549
– – of silicon 598
– by magnetron sputtering
– – of zinc oxide 534
– by molecular beam epitaxy
– – of aluminum gallium arsenide 661, 827
– – of gallium arsenide 25, 157, 433, 661, 827
– – of gallium indium phosphide 99
– – of lead strontium selenide 301
– by vapor phase epitaxy
– – through chemical vapor deposition
– – – of boron 63
– – – of diamond 416, 647
– – – of silicon 319, 499
– – – of silicon carbide 335
– – – for coating fibrous substrates 190
– – through evaporation and condensation
– – – of copper gallium selenide 765
– – – of lead sulphide 817
– – – of lead telluride 817
– – – of mercury cadmium telluride 710
– – through metalorganic chemical vapor deposition
– – – of aluminum gallium arsenide 439, 615
– – – of aluminum indium arsenide 441
– – – of cadmium selenide 525
– – – of copper oxide 683
– – – of diamond 583
– – – of gallium arsenide 73, 105, 439
– – – of indium gallium aluminum phosphide 728
– – – of indium gallium arsenide 655
– – – of indium phosphide 449, 554
– – – of low-dimensional devices 203
– – – of transition metals and their silicides 806
– – – of zinc selenide 525
– – – theory of 491
Tin
– bismuth alloy 572

Uniformity of growth 491

Vapor growth technique
– by chemical transport
– – of potassium tungsten bronze 831
– by thermal oxidation

– – of zinc oxide 277
– – theory of 603

Whisker growth
– of boron 63
– of zinc oxide 277

Yttrium
– barium cuprate 473

Zeolite 561
Zinc
– organic 449, 525
– oxide 534
– selenide 233, 525